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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/681,745	**Applicant(s)** PUN ET AL.
	Examiner TIMOTHY E. BETTON	**Art Unit** 1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2008*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.
  4a) Of the above claim(s) *6,8 and 18-30* is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-5,7,9-17 and 31-36* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicants Remarks filed on 5 May 2008 have been acknowledged and duly made of record.

Applicants' telephonic interview held on 24 April 2008 was useful in clearly delineating the inventive objective of the claimed invention. Applicants respectfully point out that the covalent crosslinking as disclosed in Kosak is fundamentally different from non-covalent crosslinking disclosed in the instant application. Paragraph 82 teaches "completely entrapped larger guests such as proteins, polypeptides, and nucleic acids." This paragraph teaches only "completely entrapped" molecules. Nowhere is it taught or suggested that these entrapped molecules can be used to crosslink the polymer. Nor does Kosak teach crosslinking of polymers through inclusion complexes. Paragraph 91 discusses biocleavable cross-linking agents, but does not teach or suggest that the agents crosslink non-covalently through inclusion complex formation.

This invention provides a material formed by crosslinking a polymer bearing inclusion hosts (such as cyclodextrin) with a linking molecule bearing at least two functional groups that, as inclusion guests, form inclusion complexes with the inclusion host. For polymers in which cyclodextrin is the inclusion host, exemplary inclusion guests include naphthol, adamantane, cholesterol, and derivatives thereof. In certain embodiments, the polymer bears inclusion guests, and linking molecules bearing inclusion hosts such as cyclodextrin are used to crosslink the polymer. Materials according to the above description can be used to deliver therapeutic agents, such as proteins, nucleic acids, and pharmaceuticals.

Status of the claims

Upon entry of the following amendments, claims 1-36 are the pending claims in the present application. No claims are cancelled or objected to. Claims 6, 8, and 18-30 are withdrawn. Claims 1-5, 7, 9-17 and 31-34 stand rejected.

Support for new claim 35 can be found throughout the specification including page 5, lines 23-25; page 30, lines 2-23; and Example 30, page 78. Support for new claim 36 can be found throughout the specification including page 5, lines 26-28 and Example 30, page 77. Applicants assert new claims 35 and 36 do not constitute new matter.

Claims Pending

1.
(previously presented) A polymer composition comprising
a linear biocompatible polymer including a plurality of inclusion hosts, and
linking molecules, each linking molecule comprising at least two moieties that form inclusion complexes with the inclusion hosts,
wherein the linking molecules crosslink the polymer through inclusion complexes.
2.
(previously presented) The polymer composition of claim 1, wherein the inclusion hosts are cyclodextrin moieties.
3.
(previously presented) The polymer composition of claim 1, further comprising at least one biologically active compound or a prodrug form thereof.
4.
(previously presented) The polymer composition of claim 3, wherein the biologically active compound is a nucleic acid.
5.
(previously presented) The polymer composition of claim 4, wherein the nucleic acid is provided in a delivery system selected from a virus, a polymer, and a liposome.

7.
(previously presented) The polymer composition of claim 3, wherein the compound is a polypeptide or a small organic molecule.

9.
(previously presented) The polymer composition of claim 3, wherein the compound is a protein or polypeptide.

10. (previously presented) The polymer composition of claim 3, wherein the biologically active compound or prodrug form thereof is provided in a delivery system.
11. (previously presented) The polymer composition of claim 10, wherein the delivery system is selected from microparticles and liposomes.
12. (previously presented) The polymer composition of claim 3, wherein the biologically active '

compound is covalently attached to a moiety that forms an inclusion complex with the inclusion host.

13. (previously presented) The polymer composition of claim 1, further comprising at least one adjuvant.

14. (previously presented) The polymer composition of claim 3, further comprising an adjuvant that increases the effectiveness of the biologically active agent.

15. (previously presented) A polymer composition comprising: a biocompatible, biodegradable polymer including a plurality of inclusion hosts, and linking molecules, each linking molecule comprising at least two moieties that form inclusion
complexes with the inclusion hosts,
wherein the linking molecules crosslink the polymer through inclusion complexes.

16. (previously presented) A polymer composition comprising: a biocompatible polymer including a plurality of inclusion hosts, and linking molecules, each linking molecule comprising at least three moieties that form inclusion
complexes with the inclusion hosts,
wherein the linking molecules crosslink the polymer through inclusion complexes.

17. (previously presented) A polymer composition comprising:
a biocompatible polymer including a plurality of cyclodextrin moieties, and linking molecules, each linking molecule comprising at least two moieties that form inclusion complexes with the cyclodextrin moieties, wherein each cyclodextrin moiety has no more than two bonds to the polymer backbone, and the linking molecules crosslink the polymer through inclusion complexes.

31. (previously presented) The polymer of claim 31, wherein the linking molecules crosslink the polymer intramolecularly.

32. (previously presented) The polymer of claim 31, wherein the linking molecules crosslink the polymer intermolecularly.

33. (previously presented) The polymer of claim 1, wherein the linking molecules and the polymer are distinct molecules.

34. (previously presented) The polymer of claim 1, wherein the linking molecules crosslink the polymer solely through the inclusion complexes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

This invention provides a material formed by crosslinking a polymer bearing inclusion hosts (such as cyclodextrin) with a linking molecule bearing at least two functional groups that, as inclusion guests, form inclusion complexes with the inclusion host. For polymers in which cyclodextrin is the inclusion host, exemplary inclusion guests include naphthol, adamantane, cholesterol, and derivatives thereof. In certain embodiments, the polymer bears inclusion guests, and linking molecules bearing inclusion hosts such as cyclodextrin are used to crosslink the polymer. Materials according to the above description can be used to deliver therapeutic agents, such as proteins, nucleic acids, and pharmaceuticals.

Claims 1-5, 7, 9-17 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinaga (USPN 5,608,015) in view of Agrawal et al. (USPN 5,691,316) and Nobuhiko (USPN 5,855,900).

Yoshinaga teaches a process for producing a polymer containing immobilized cyclodextrin comprising reacting a cyclodextrin derivative with an acid halide monomer of an .alpha.,.beta.-unsaturated acid or a derivative thereof or with an .alpha.,.beta.-unsaturated acid monomer having a terminal isocyanate group or a derivative thereof, said cyclodextrin derivative being obtained by reacting cyclodextrin with a carbonyl halide, an acid anhydride or a compound of one of the following formulas, etc.

A polymer having immobilized cyclodextrin can be obtained wherein one unit of the cyclodextrin derivative is immobilized with respect to the monomer and which shows high reactivity in the polymer reaction (abstract only).

Yoshinaga teaches a process for producing cyclodextrin derivatives, and to a process for producing polymers containing immobilized cyclodextrin therein. More specifically, this invention relates to a process for producing cyclodextrin derivatives, as well as a process for producing polymers containing immobilized cyclodextrin therein by which one unit of cyclodextrin can always be immobilized with respect to one basic monomer unit (col. 1, l/s 12-18).

Yoshinaga teaches cyclodextrin is a cyclic oligosaccharide in which at least six glucose units combine together through .alpha.-1, 4 linkage, and those having 6, 7 or 8 glucose units are particularly well known. There are many documents known regarding their applications. All these known applications utilize the selective inclusion ability of cyclodextrin due brought about by the hydrophobic nature of the inside of the cyclodextrin ring and also by the fact that the size of said ring depends on the number of glucose units; cyclodextrin is currently used as a packing for chromatographic separation, as a catalyst, as a masking agent for the off-taste or foul smell of foods, as an agent for retaining volatile materials or for solubilizing sparingly soluble materials, and the like.

One skilled in the art will recognize that such selective inclusion ability of cyclodextrin provides an effective means for separating and extracting hydrophobic materials; however, cyclodextrin is water-soluble, and therefore, cyclodextrin is not suitable for use as a separating or extracting agent since it is difficult not only to separate inclusion compounds from the reaction mixture but also to separate the inclusion compound from cyclodextrin. These variable ways and properties of cyclodextrin inclusion make the limitations of claims 31-36 obvious.

Thus, intermolecular, intramolecular, a clear distinction between the polymer and the linking molecules, within the polymer chain and appending are all generally represented by the teachings of Yoshinaga.

If cyclodextrin is immobilized on a polymer, etc. while retaining its inclusion ability, it may be packed in a column and a component of interest may be easily separated, recovered or removed by an adsorption/desorption procedure or by a chromatographic procedure as with ion exchange resins or activated carbon (col. 1, l/s 22-54).

Further Yoshinaga teaches an embodiment drawn to the variable functionality of the cyclodextrin immobilized polymer in the following reference claim 9 : A process for producing a cyclodextrin-immobilized polymer by copolymerizing at least one polymerizable monomer selected from the group consisting of a salt of an .alpha.,.beta.-unsaturated acid, a derivative thereof, an .alpha.,.beta.-unsaturated acid having a terminal isocyanate group and a derivative thereof with another polymerizable monomer to form a polymer and subsequently reacting said polymer with a blocked cyclodextrin derivative having a single, unprotected primary hydroxyl group and having all of its remaining primary hydroxyl groups and all of its secondary hydroxyl groups blocked by a blocking group.

Yoshinaga does not teach the limitation in the present invention drawn to noncovalent bonding.

Yoshinaga does not teach the limitation or elected species of a nucleic acid according to claim 9.

However, Agrawal et al teach a composition including an oligonucleotide complexed with a cyclodextrin. The oligonucleotide may be noncovalently associated with the cyclodextrin. Alternatively, the oligonucleotide may be covalently complexed with adamantane which is noncovalently associated with the cyclodextrin. Also disclosed are methods of enhancing the cellular uptake and intracellular concentration of oligonucleotides, methods of increasing the solubility of an oligonucleotide in a cell, and methods of treating a cell for viral infection or to prevent viral infection (abstract only).

Note: nucleotides are a subunit that polymerizes into nucleic acids (DNA or RNA). Each nucleotide consists of a nitrogenous base; a sugar and one to three phosphate groups.

An oligonucleotide is known in the art as a short polymer of two to twenty nucleotides.

Agrawal et al. teach […] an oligonucleotide can be covalently linked to an adamantane molecule which is then noncovalently linked to the cyclodextrin. Adamantane enters into the cavity of a cyclodextrin and forms a stable, noncovalent complex with it […](col. 7, l/s 51-55) (col. 8, l/s 18-34).

Agrawal et al. does not teach a *linear* biocompatible polymer expressly.

However, Nobuhiko teach [an] invention [which] provides as a novel drug carrier into a living body a highly water-soluble polymer that can carry and release a drug at a desired rate and a supramolecular-structured biodegradable polymeric assembly that can release the drug it carries as a function of the specific behavior of biodegradation of a diseased body. A supramolecular-structured biodegradable polymeric assembly according to the invention comprises lots of drug-binding cyclic compounds obtained by combining the drug with .alpha.-, .beta.- and .gamma.-cyclodextrins and a linear polymeric chain compound threading through the structural cavity of the cyclic compounds, said ***linear*** polymeric chain with biodegradable sites at the both terminals thereof (abstract only).

Accordingly, Nobuhiko teach that this invention relates to a supramolecular-structured bio-degradable polymeric assembly with biodegradable moieties at both terminals in the body of the subject (col. 1, l/s 7-9).

Of known biodegradable polymers, attention has been paid by researchers on hydrophilic/water soluble polymers designed to effectively deliver drugs linked with covalent and/or ion bonds thereof and hydrophobic polymers that gradually release drugs dissolved or dispersed therein as a result of biodegradation(c.1, l/s 11-16).

Nobuhiko teach subject matter drawn to the reasoning of the plurality of inclusion hosts based on the variable moieties of cyclodextrin which is incorporated into the polymer matrix:

The relationship between the .alpha.-, .beta.- and .gamma.-cyclodextrins to be combined with a drug and the polymer threading through the cyclodextrins […].

(16) 1) .alpha.-cyclodextrin poly(ethylene glycol)

(17) 2) .beta.-cyclodextrin poly(ethylene glycol), poly(propylene glycol), polyisobutylene

(18) 3) .gamma.-cyclodextrin poly(ethylene glycol), poly(propylene glycol), polyisobutylene, polymethylvinylether

(19) Since polymers having bulky groups such as 2,4-dinitrophenyl and 3,6-dinitrobenzoyl groups at the both terminals cannot be threaded, relatively small functional groups such as methyl, methoxy and amine group are preferably used.

(20) The average molecular weight of poly(ethylene glycol), poly (propylene glycol), polyisobutylene or their block-copolymers is between 200 and 5,000 and preferably between 400 and 2,000.

(21) Preferable biodegradable sites of linear polymeric chain polymeric compounds are oligopeptide chains containing from one to five repeating units and comprising as components one or more than one amino acids selected from alanine, valine, leucine, is oleucine, methionine, proline, phenylalanine, tryptophan, aspartic acid, glutamic acid, glycine, serine, threonine, tyrosine, cysteine, lysine, arginine and histidine or oligosaccharide chains containing from one to five repeating units and comprising as components one or more than one of dextran, hyaluronic acid, chitin, chitosan, alginic acid, chondroitin sulfate, starch and pullulan.

(22) A drug to be used for the purpose of the invention is preferably bound to cyclodextrins preferably by a single chain ester or urethane bond that can hardly be subjected to enzymatic degradation because of steric hindrance.

(23) Drugs that can be linked with cyclodextrins for the purpose of the invention include peptide drugs and mitomycin C.

> In view of the inventive objective of claimed invention which teaches a composition containing particulate composite of a polymer and a therapeutic agent. The composition also contains a complexing agent. The polymer interacts with the complexing agent in a host-guest or a guest-host interaction to form an inclusion complex. A therapeutic composition of the invention may be used to deliver the therapeutic agent and to treat various disorders. Both the polymer of the particulate

> composite and the complexing agent may be used to introduce functionality into the therapeutic composition. The invention also relates to a method of preparing a composition. The method combines a therapeutic agent, a polymer having host or guest functionality, and a complexing agent having guest or host functionality to form the therapeutic composition. The complexing agent forms an inclusion complex with the polymer. The invention also relates to a method of delivering a therapeutic agent. According to the method, a therapeutically effective amount of a therapeutic composition of the invention is administered to a mammal (e.g. person or animal) in recognized need of the therapeutic (please see USPN 7,018,609, abstract and column3, lines 1-38).

Nobuhiko essentially teach the inventive objective of the claimed invention by disclosing embodiments which teach the rationale for alternate functionality of cyclodextrin within the polymer crosslinking matrix. The following discloses an embodiment drawn primarily to linear linkage with an example of a non-linear linkage in view of how the drug may made bioavailable to the body: The remarkable feature of a biodegradable polymeric assembly according to the invention is that a drug is not bound to a polymeric chain, and neither dissolved nor dispersed in a polymer compound but held by the formation of a supra-molecular polymeric assembly. Therefore, the drug bound to a biodegradable polymeric assembly according to the invention is released not by a process of cleavage of individual polymer-drug linkages but by a process wherein the biodegradation at selected sites to break down the entire assembly in a controlled manner. More specifically, the drug carried by the polymeric assembly is not bound to any polymeric chains so that the entire drug carried by the polymeric assembly may be released into the body of a patient at a selected time as the polymeric assembly is dissociated at all biodegradable sites. The drug may be also released into the body of a patient non-linearly (in a pulse-like manner) by appropriately controlling the rate of dissociating the polymeric assembly at the biodegradable sites, the rate of releasing the drug from the sites it is held to the polymeric assembly and the amount of the drug carried by the polymeric assembly per unit weight of the latter.

A polymeric assembly according to the invention is also advantageous in that it can individually solve the problem of a reduced solubility of the polymeric chain that may arise when a drug is bound thereto, that of selection of the mode of binding a drug to polymeric chains and that of selection of biodegradable sites of the polymeric assembly. A biodegradable polymeric assembly according to the invention can be applied for the preparation of a hydrophilic gel (hydrogel) by crosslinking it at appropriate biodegradable sites located at any of the terminals of the biodegradable polymeric assembly by means of a crosslinking agent in order to prevent the drug held to the polymeric assembly from leaking out unless the latter is dissociated (columns 2 and 3, l/s 58-67 and 1-25, respectively).

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinaga (USPN 5,608,015) in view of Agrawal et al. (USPN 5,691,316) and Nobuhiko (USPN 5,855,900) as applied to claims 1-5, 12, 15-17 and 31-34 above, and further in view of Platzek et al. (USPN 6,068,831).

Platzek et al. teach pseudopolyrotaxanes, which are drawn to the current invention as disclosed

Platzek et al. teach that […] they are mixed with one or more adjuvant(s) that are commonly used in galenicals (for example, methyl cellulose, lactose, mannitol] and/or surfactant(s) [for example, lecithins, Tween.sup.(R), Myrj.sup.(R)] and/or flavoring substance(s) for taste correction [for example, ethereal oils] (col. 9, l/s 12-16).

Thus, it would have been *prima facie* obvious to the one of skill in the art at the time of invention to readily recognize a reasonable expectation of success via the incorporating of the teachings and modifications of Yoshinaga (USPN 5,608,015) , Agrawal et al. (USPN 5,691,316), Nobuhiko (USPN 5,855,900) and Platzek et al. (USPN 6,068,831).

Yoshinaga teaches a process for producing a polymer containing immobilized cyclodextrin comprising reacting a cyclodextrin derivative with a bioactive agent. Yoshinaga teaches the that one part of cyclodextrin may be immobilized with respect to one basic monomer unit with the suggestion that other portions of the cyclodextrin molecule may be implemented in the matrix other ways in relation to the current invention. Yoshinaga teach variable instances of cyclodextrin bonding which instantly read on intermolecular and/or intramolecular bonding. The limitations drawn to appending and being “within the polymer chain” would be instantly recognized by one in the art in view of the teachings and/or modifications of Yoshinaga.

Further, Agrawal et al. teach […] an oligonucleotide can be covalently linked to an adamantane molecule which is then noncovalently linked to the cyclodextrin. Adamantane enters into the cavity of a cyclodextrin and forms a stable, noncovalent complex with it. Specifically, Agrawal teaches the elected nucleic acid component linked covalently to an adamantane molecule which is noncovalently linked to the cyclodextrin molecule.

Accordingly, Nobuhiko provides the motivation to combine the references as cited based on adequate subject matter and the inventive objective which encompasses the issues of the claimed invention. Nobuhiko teaches a CD-PEGs (cyclodextrin- polyethylene glycol polymers) as elected, also known in the art as pseudopolyrotaxanes (polyrotaxanes). Nobuhiko teaches variable forms of cyclodextrin which are designed to complex differently within the polymer matrix. Whereas, reference was made *supra* in view of the particular functionality of these molecules based on these differences, the one of skill would be inclined to conclude that these variable forms of CD will result in all sorts of designated bonding according to the limitations of claims 31-36. Accordingly, and most importantly, Nobuhiko teaches linear cyclodextrin-based polymers. Further, Platzek provides further motivation to combine by teaching polyrotaxanes (the proper term for the compositions represented in the claimed invention) and an embodiment drawn to adjuvants as comprised. Thus, the references as taught above sufficiently encompass the subject matter of claimed invention. Principally, the references as taught adequately address the inventive objective of the claimed invention by teaching polyrotaxanes and their variable properties, characteristics, and susceptibilities according to the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy E. Betton whose telephone number is (571) 272-9922. The examiner can normally be reached on Monday-Friday 8:30a - 5:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James O. Wilson/

Supervisory Patent Examiner, Art Unit 1624

TEB